

Speed Test

$$\cos(30^\circ) = \frac{\sqrt{3}}{2}$$

$$\tan(30^\circ) = \frac{\sqrt{3}}{3}$$

$$\sin(180^\circ) = 0$$

$$\cos(120^\circ) = -\frac{1}{2}$$

$$\tan(90^\circ) = \text{undef.}$$

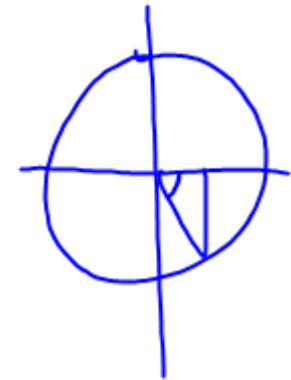
$$\sin(300^\circ) = -\frac{\sqrt{3}}{2}$$

$$\sin(30^\circ) = \frac{1}{2}$$

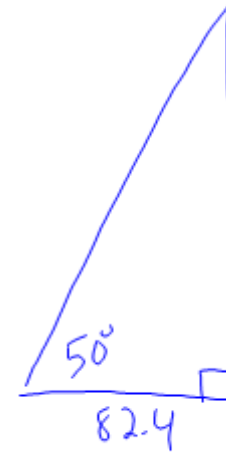
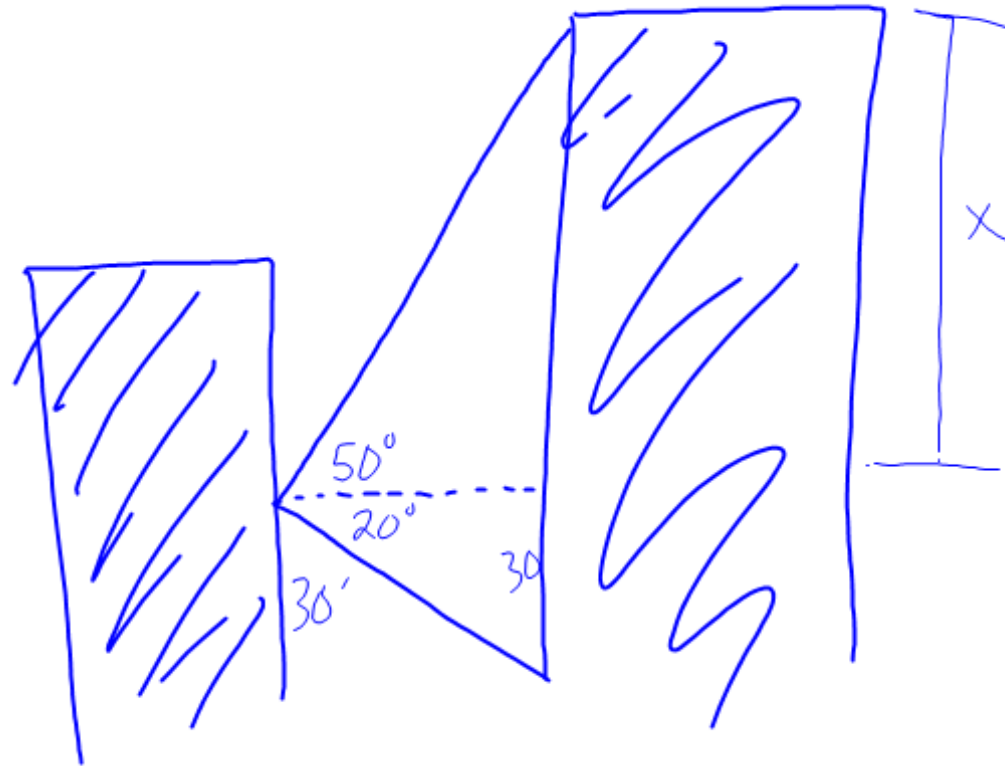
$$\tan(360^\circ) = 0$$

$$\cos(150^\circ) = -\frac{\sqrt{3}}{2}$$

$$\cos(60^\circ) = \frac{1}{2}$$



2.4 #37

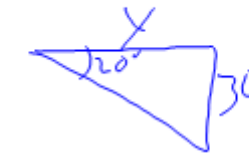


$$\tan 50 = \frac{X}{82.4}$$

$$X = 82.4 \tan 50$$

$$X = 98.2 + 30$$

$$h = 128.2$$



$$\tan 20 = \frac{30}{Y}$$

$$Y = \frac{30}{\tan 20} \approx 82.4$$

2.5 #19

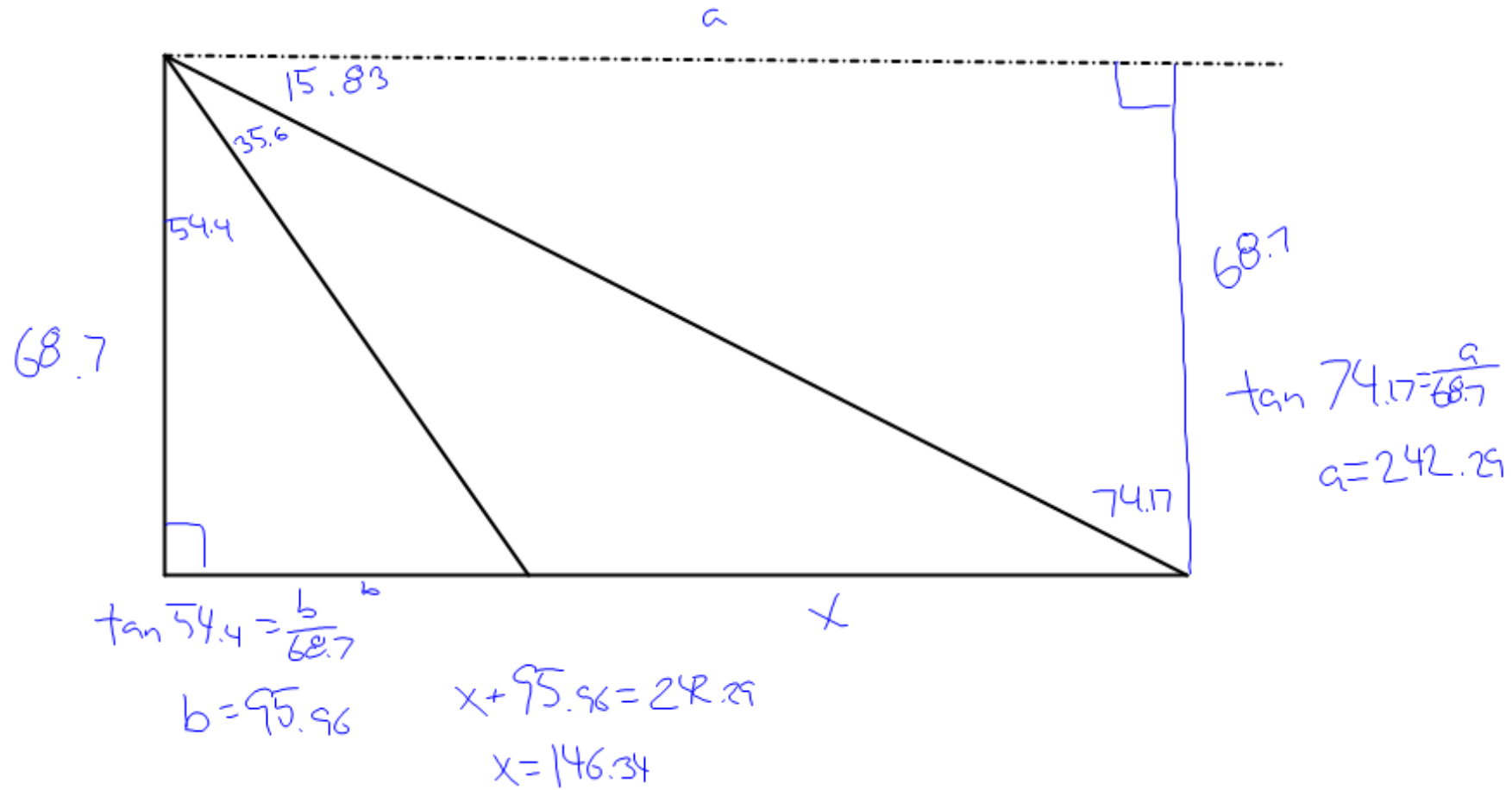
$$ax = b + cx$$

$$ax - cx = b$$

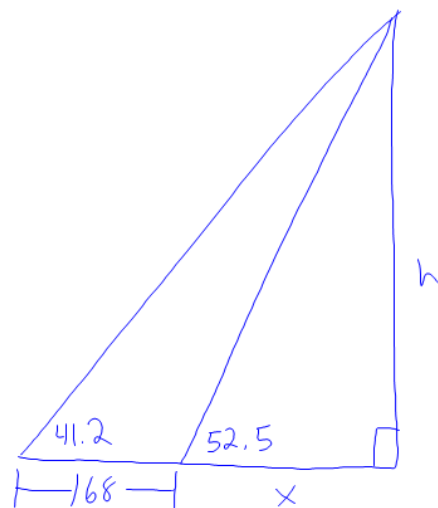
$$x(a - c) = b$$

$$x = \frac{b}{a - c}$$

26



(24)



$$\tan 41.2 = \frac{h}{168+x}$$

$$\tan 52.5 = \frac{h}{x}$$

$$x \tan 52.5 = h$$

$$\tan 41.2 = \frac{x \tan 52.5}{168+x}$$

$$\tan 41.2 (168+x) = x \tan 52.5$$

$$168 \tan 41.2 + \tan 41.2 x = x \tan 52.5$$

$$168 \tan 41.2 = x \tan 52.5 - x \tan 41.2$$

$$\frac{168 \tan 41.2}{\tan 52.5 - \tan 41.2} = x$$

$$h = 343.8 \cdot \tan 52.5$$

$$h \approx 448$$

$$x =$$

$$x = 343.80$$

Test Concepts

- Find 6 trig functions and θ given a point, equation, or value of one function
- Quadrantal θ 's - an understanding of 1, 0, undef.
- Reciprocal + cofunctions, solving for an angle

2.4 #37 • Angles of elevation and depression

- Prob. like ex. 4 p. 79 / whole prob.
- "speed" test

$$\tan \theta = \text{undef.} \\ \frac{y}{x}, x=0$$

$$\sin(3\theta + 2) = \cos(2\theta + 4)$$

$$3\theta + 2 + 2\theta + 4 = 90$$

$$\tan(3\theta + 2) = \frac{1}{\cot(2\theta + 4)}$$

$$3\theta + 2 = 2\theta + 4$$

Ch. 1 Review # 1, 9, 11, 24, 26, 29, 34, 40, 41

Ch. 2 Review # 1, 5, 11-19, 34, 52

Hw

- finish these
- Study for test
- Sleep